



TÜVRheinland®
CERT
ISO 9001

FOOD PROCESSING INDUSTRY SOLUTIONS

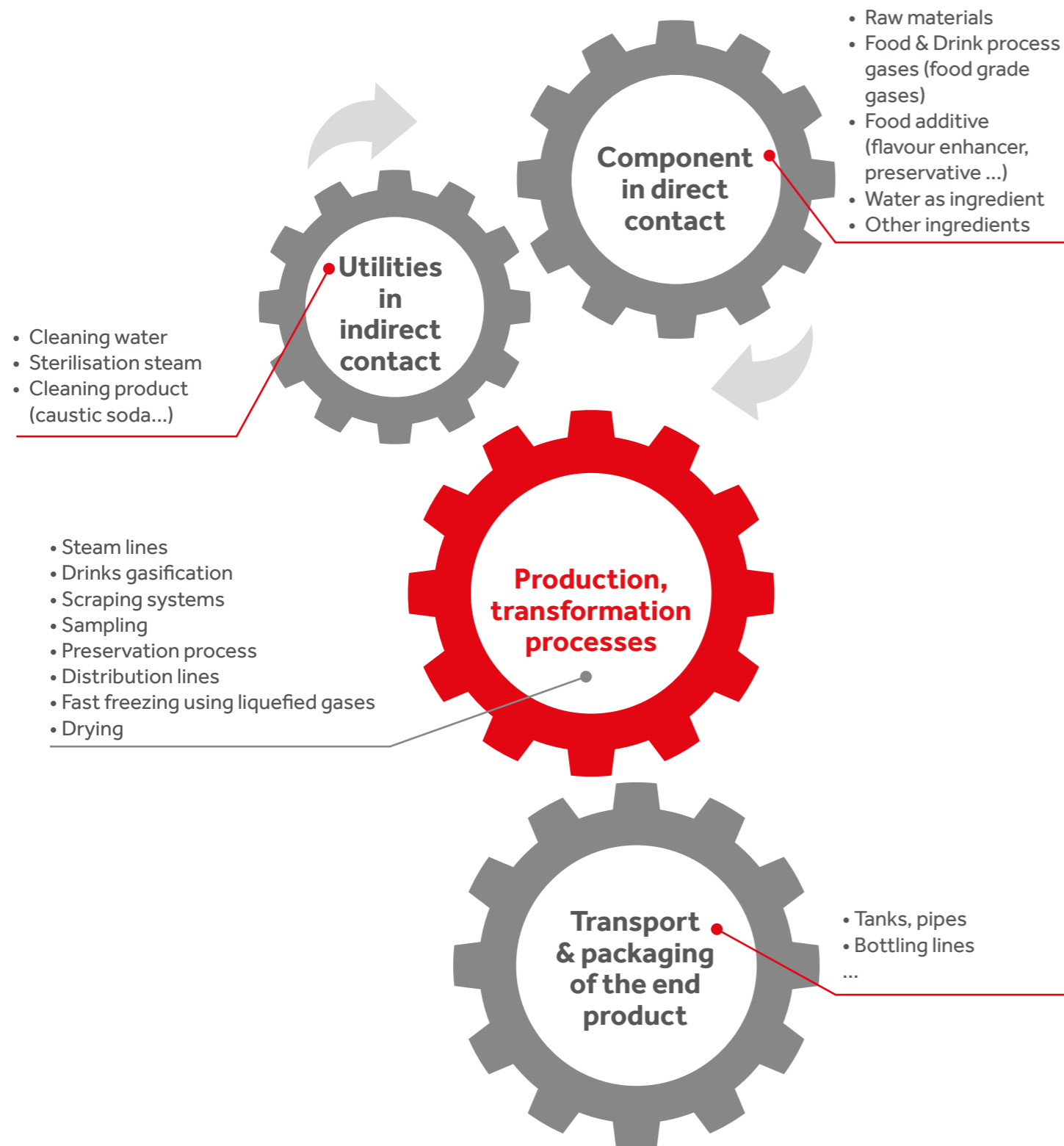


EN - 2018/2

Meca-inox
BALL VALVES

The **(EC) N°1935/2004** regulation controls the food and beverage industry market. This regulation sets the requirements to be applied for materials and articles intended to come in **contact directly or indirectly** with foodstuffs.

Foodstuffs are defined in article 2 of regulation **(EC) n° 178/2002** : beverages, chewing gums and any substance including water that is intentionally incorporated into food during its **production, preparation** or its **processing**.

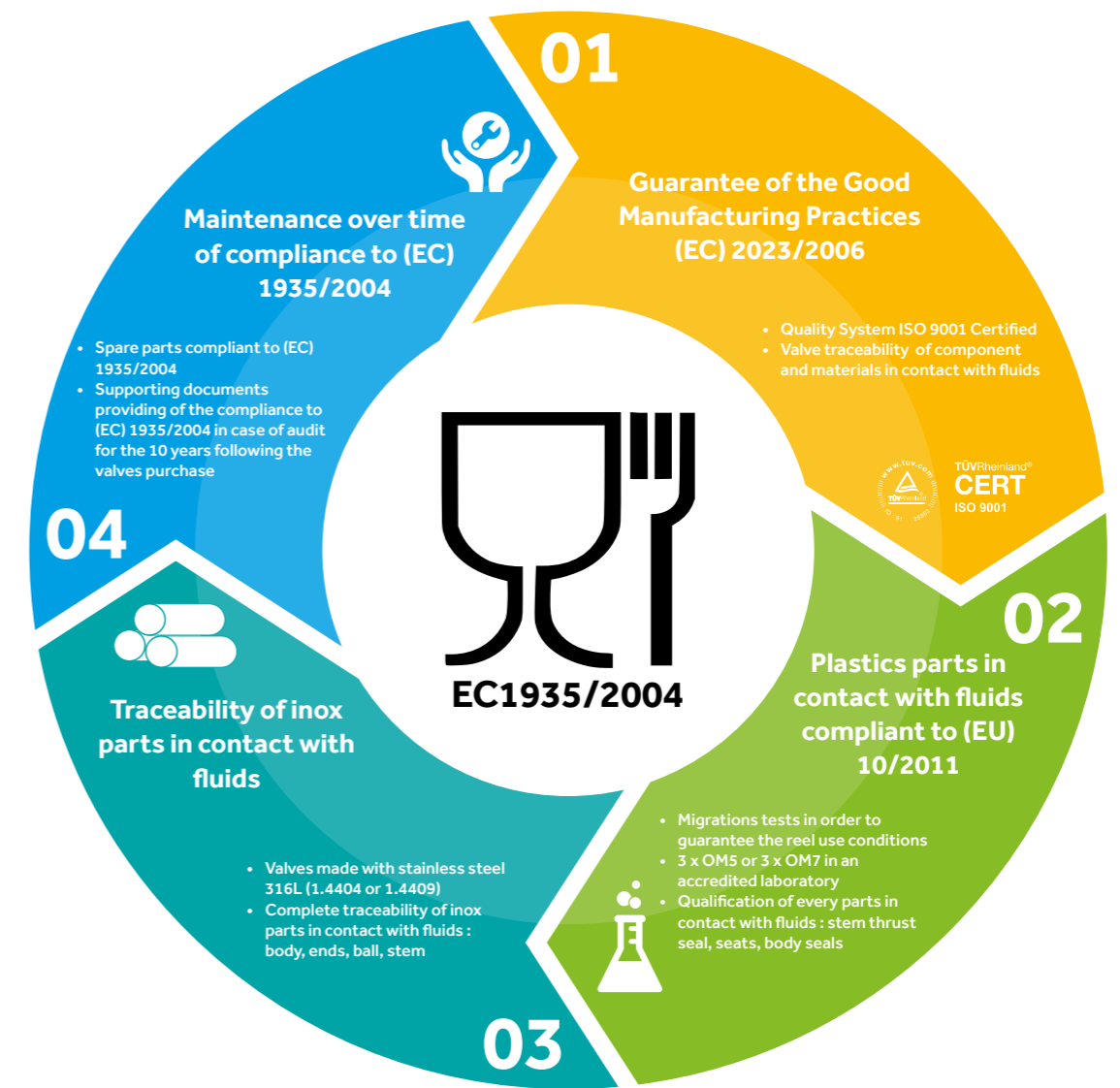


All equipments including valves are used during processes such as **food fast freezing** with liquefied gases, **steam cooking**, or **food sampling**.

Being in contact whether direct or indirect with foodstuffs, **these equipments are submitted to the (EC) n°1935/2004.**

To meet the requirements of our clients, we offer a **complete range** of ball valves in **compliance with the (EC) n°1935/2004 regulation.**

We also propose solutions for upgrade to compliance and maintenance of existing plants.



They trust us : Messer, Air Liquide, Tetrapak, Wrigley, Nestlé, GEA, Definox, SPX Flow, Pierre Guérin, Mars, Saipol, Maisonneuve

PROCESS -20 °C to + 121 °C - ALL FOOD & INGREDIENTS (Liquids, Gas, Powders)



- 3-piece ball valves - PN4 I**
- For piping DN08 to DN200
 - PN100 to PN16
 - Ball and ends in 1.4435 (low ferrite)
 - Ball and ends internal roughness : Ra.04 µm
 - EC1935 plastic certified

- Options**
- True Bore version (pigging system)
 - PTFE Cavity fillers
 - Actuation
 - EC1935 total certified



PROCESS up to + 250°C - STEAM, OVERHEATED WATER, OILS



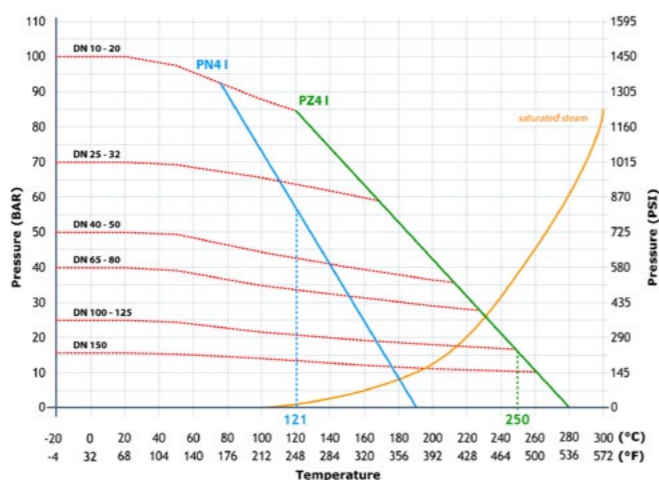
- 3-Piece Ball Valves - PZ4 I**
- For piping DN08 to DN200
 - PN100 to PN16
 - High Temperature Seats
 - EC1935 plastic certified

- Options**
- Steam Jacket, Design Double Block & Bleed
 - V-Ball version for regulation
 - EC1935 total certified



Valves	Ball Seats	Body Seal
PN4I	TFM1600®	PTFE
PZ4I	PTFE 20% PEEK	PTFE

FDA compliant plastic materials
21 CFR Section 177.1550



CO2 LIQUID for Gasification of beverages + Other gas between -50°C and + 121°C



- 3-piece Ball Valves - PS4I PG and PY4 I**
- For piping DN08 to DN200
 - PN100 to PN16
 - Functional EN1626 / -50°C
 - Ball with upstream vent hole
 - Body sealing <10-5 mbar / L.s-1
 - EC1935 plastic certified

- Options**
- Pi marking option for tanks transport
 - EC1935 total certified



FAST FREEZING LIQUID NITROGEN -196°C to + 121°C

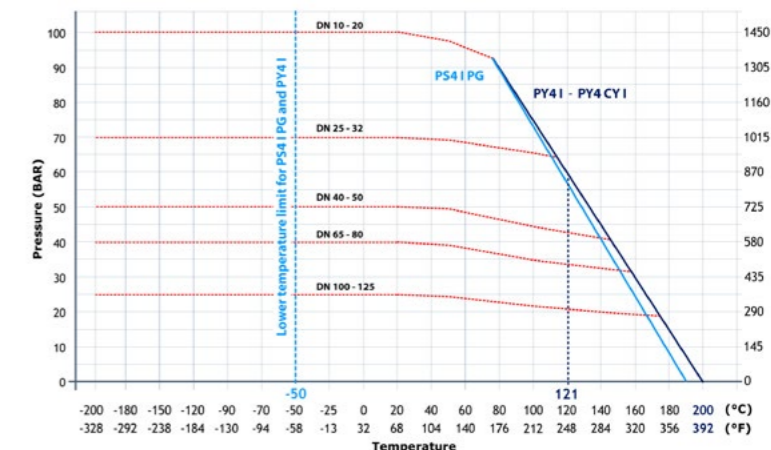


- 3-Piece Ball Valves - PY4CY I**
- For piping DN08 to DN150
 - PN100 to PN16
 - Functional EN1626 / -196 °C
 - Ball with upstream vent hole
 - Body sealing <10-5 mbar / L.s-1
 - EC1935 plastic certified

- Options**
- EC1935 total certified



Valves	Ball Seats	Body Seal
PS4 I PG	PTFE 2 nd generation	PTFE
PY4I	TF3215®	PTFE
PY4CYI	PTFE Carbon	



Metallic Parts in Contact with

Fluids 100% Stainless Steel 316L

TOTAL QUALIFICATION OF PLASTIC COMPONENTS

Test Fluids A, B & D2
Tests Conditions OM5 & OM7
Multi-Contact Tests



MARKING & TRACEABILITY

EC1935 label with valve
batch number
Delivered with EC1935
plastic parts certificate



ACTUATED VALVES



For Piloted Process

- Double or Single effect Pneumatic Actuators, 500,000 cycles guaranteed
- Electric Actuators
- Limit switches, Solenoid valves ...

Options

- CNI® Nickel-PTFE Coated Actuator Aggressive environments (Cleaning agents ...)



SAFE ISOLATION & PURGE

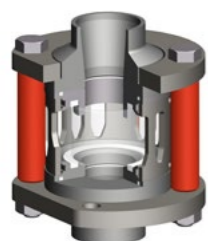


Double Block & Bleed

- Double isolation & Line Bleeding
- Safe Maintenance
- Steam and high Temperatures lines and / or Dangerous
- Piping DN08 to DN 200



SIGHT GLASS



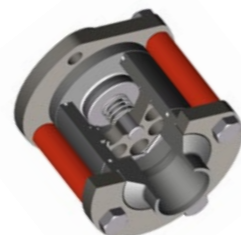
Visual fluid control - VC4 I

- PYREX glass
- PN7 to PN16
- Piping DN08 to DN65
- All Foods -20°C to +121°C

CHECK VALVES

Non-return Solution - CL4 I

- Piston 316L & PTFE
- PN80
- Piping DN08 to DN65
- All Foods -20°C to +121°C
- Liquid Nitrogen and CO2 up to -196 °C



REGULATION



Flow / Pressure Adjustment Solution - V-Ball

- V30° or V60° ball
- Manual or Actuated
- Tight in closed position
- 2 times less pressure drop than a standard control valve



JACKETED VALVE



Solution for Maintaining temperature (Chocolate, chewing gum ...)

- Steam Jacket up to 25bar
- Compatible with Steam and Thermal Oils
- Available in PZ4I EC1935 range



FLUSHING VALVES



Tank Bottom Solution

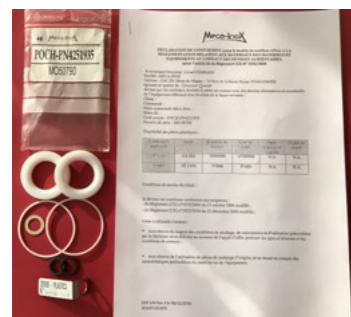
- No dead volume in the tank
- Available in PN4I and PZ4I EC1935 series
- Also available in steam jacket version



Pick-up valve

- No dead volume in the line
- Available in PN4I and PZ4I EC1935 series

MAINTENANCE & COMPLIANCE INSTALLATIONS



EC1935 Maintenance kit

- Plastic Sealing Parts
- Stainless Steel Label with Traceability
- Certificate of conformity EC1935 plastic parts



EC1935 Valve Body Kit Boxes (PN4 I, PZ4 I, ...)

- Stainless steel valve body ready to install
- 100% compatible with Meca-Inox body in place
- Certificate of conformity EC1935 plastic parts

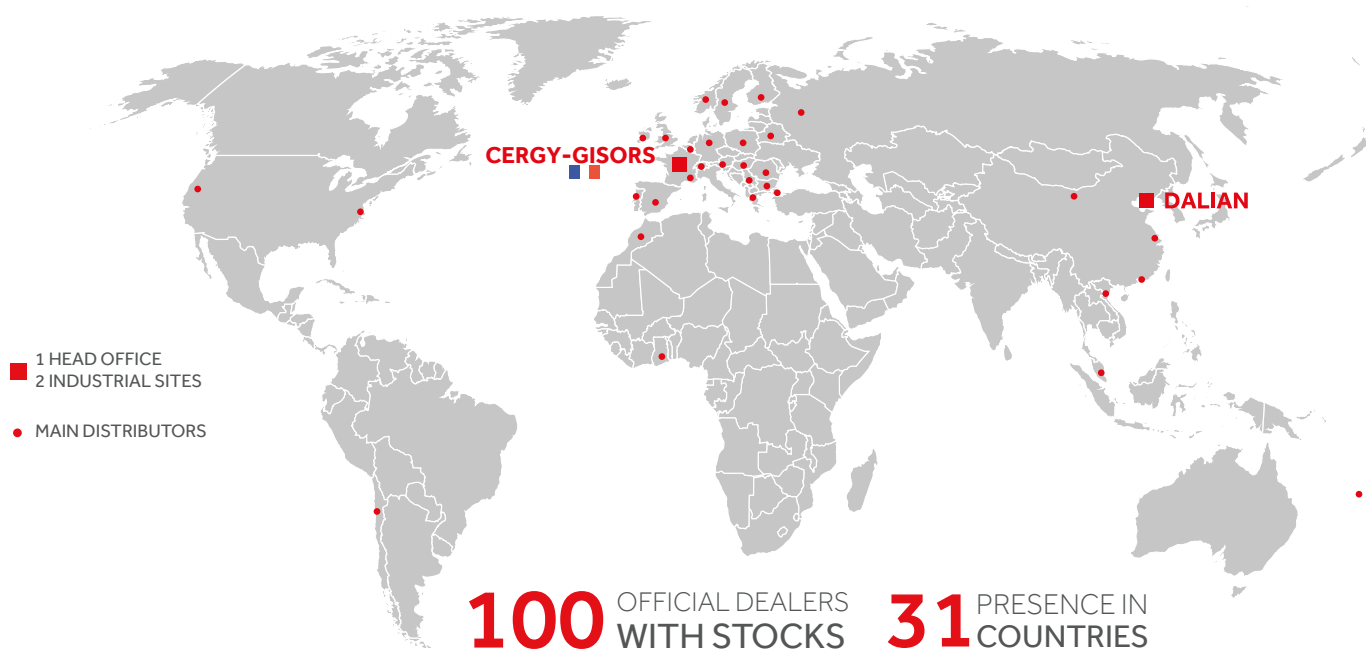
Meca-Inox Body EC1935 compatible
with others marks of valves for conformity of installations, consult us.

Meca-inox

BALL VALVES

HIGH QUALITY BALL VALVES

BORN IN FRANCE, WORLDWIDE AVAILABLE



Since 1967, MECA-INOX has manufactured ball valves and is a European leading signature for high quality ball valves dedicated to Chemistry, Pharma & Cosmetic, Cryogenic fluids, Food & Beverage and Industry with more than 3 million valves installed all over the world and 150 000 ball valves yearly production.

Expert in stainless steel and carbon steel ball valves technology, we have developed over the years a complete products offer internationally recognized for its reliability, performance, and flexibility of use. Combining high quality materials and our specific knowhow of design and manufacturing, our products meet the most stringent requirements.

From our industrial sites of Gisors (France) and Dalian (China), our teams can support you anywhere in the world. Our network of distributors provide an optimal availability of our valves and equipment for your international projects.

meca-inox.com

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A BRAND OF GROUP

Meca-inox
SINCE 1955